

1 WHAT IS CLAIMED IS:

2

3 1. A method for fabrication of an enclosure
4 device for a preselected set of speaker drivers, said
5 enclosure having any preselected external shape and
6 including internal cavities and channels formed to enhance
7 the ability of said drivers to reproduce sound with
8 preselected characteristics, the method comprising the
9 steps of:

10 selecting said external shape and outline the
11 external circumferential edge to create a base template;

12 placement of the outline of the internal
13 circumferential edges of said drivers within said external
14 circumferential edge outline of said base template;

15 placement of a plurality of guide holes within
16 said internal circumferential edge;

17 calculate the volume for the driver chambers and
18 supporting ports;

19 select the number said base templates required to
20 produce the desired volume of chambers and ports;

21 outline said internal circumferential edges of
22 said drivers and said guide holes on each of said base
23 templates whereby said base template external on one end
24 has openings into which said preselected drivers may be
25 mounted, said base template external on the opposing side
26 terminates the driver chambers and said base templates
27 between space apart said external opposing base templates
28 thereby creating the desired chamber volume and ports;

29 outline circumferential edges of internal
30 supports to strengthen and stabilize said enclosure, the
31 placement of said internal supports being selected whereby
32 said drivers may be fully inserted within said enclosure
33 without being limited by said supports;

34 apply each template outline of external
35 circumferential edges and internal circumferential edges to
36 preselected sheet stock;

1 cut each layer of sheet stock along said
2 circumferential edges;
3 calculate the desired characteristics of the
4 supporting crossover network for said drivers;
5 fabricate crossover network with said
6 characteristics and terminate said network with connectors
7 for each driver and for externally applied user supplied
8 input;
9 mount said crossover network to a selected layer
10 whereby said driver connectors are internally accessible to
11 attach to said drivers upon the condition of said drivers
12 mounted within said enclosure and said externally applied
13 user supplied input is externally accessible;
14 insert a reinforcing rod having threaded ends
15 within each guide hole of an external layer;
16 apply adhesive to at least one side of each
17 adjacent layer between said external layer and inside of
18 opposing external layer;
19 assemble layers in preselected order by inserting
20 said reinforcing rods through each successive layer
21 terminating with said opposing external layer;
22 apply a nut to each said threaded ends of said
23 reinforcing rods and tighten each of said nuts thereby
24 compressing said layers without deforming said layers or
25 distorting the sound reproduction characteristics of said
26 enclosure;
27 mount said selected drivers within said
28 enclosure, attaching the terminals of each driver to the
29 corresponding internal connections of said crossover
30 network;
31 apply a preselected veneer to the external
32 surface of said assembled enclosure; and,
33 apply a speaker cloth layer over said drivers.
34
35
36

1 2. The method of claim 1 further comprising the
2 steps of:
3 testing said assembled templates for sound
4 reproduction characteristics; and,
5 adjusting selected circumferential edges to
6 create desired response of enclosure and drivers.
7